Long-Range Plan for Technology, 1996-2010:

REQUESTS TO THE TEXAS LEGISLATURE, ACTIONS, AND RECOMMENDATIONS

In order to achieve the Vision of Technology in Education in 2010 and to meet the needs delineated above, the *Long-Range Plan for Technology*, 1996-2010 consists of three types of procedures for implementation. The plan:

- makes Requests to the Texas Legislature,
- states Actions that will be taken by the Texas Education Agency, and
- proposes Recommendations to other entities. These entities include other state agencies, regional education service centers, local education agencies, institutions of higher education, communities, and the private sector.

The Requests to the Texas Legislature, Actions by the Texas Education Agency, and Recommendations to other entities concentrate on four areas:

- Teaching and Learning
- Educator Preparation and Development
- Administration and Support Services
- Infrastructure for Technology

In addition, Legislative Requests, Actions, and Recommendations are established for three time periods:

1. Short-term: 1997-1998 2. Mid-term: 1999-2002 3. Long-term: 2003-2010

Following are the Requests to the Texas Legislature and the Actions and Recommendations for each of the four areas, delineated by time period. Each area is introduced by an Executive Summary.

REQUESTS TO THE TEXAS LEGISLATURE

EXECUTIVE SUMMARY

In the past eight years, the Texas Legislature has accomplished a number of significant actions to support the integration of technologies into public and higher education. Among the highlights are the following achievements:

- established the Technology Allotment, which currentlyprovides \$30 per student to every school district for professional development and acquisition of hardware and software;
- establishment of the Telecommunications Infrastructure Fund to provide hardware, wiring, materials, and training for telecommunications installation and development over the next 10 years;
- directing the Texas Higher Education Coordinating Board to develop a master plan for distance learning; and
- directing the State Board of Education to develop an educational technology plan.

These actions join others in helping Texas become a national leader in educational uses of technology and telecommunications.

In taking full advantage of these legislative actions, the Texas Education Agency has:

- focused on equity in resource sharing;
- ensured comprehensive opportunities for distance learning;
- encouraged innovative uses of technology by schools, and;
- coordinated with other state agencies and institutions of higher learning.

State implementation of legislative directives and fiscal support is illustrated in the "Accomplishments of the 1988-2000 Long-Range Plan for Technology of the State Board of Education" in this document's Appendix. This implementation has not only helped to provide the boxes and wires that undergird communications but has also enhanced instruction by classroom teachers, enriched students' learning, and touched the lives of parents.

The Texas Legislature can play a similarly critical role in bringing to life the *State Board* of *Education Long-Range Plan for Technology*, 1996-2010. Legislative requests address four key areas:

- Infrastructure for Technology,
- Teaching and Learning,
- Educator Preparation and Development, and
- Administration and Support Services.

Infrastructure for Technology.

A comprehensive state technology system, networked among a multiplicity of entities to carry voice, video, and data, must be established. Such an infrastructure is fundamental to the long-range plan. In fact, it is fundamental to all of public and higher education as well as to the provision of many state services.

The priority in this plan for technology is public education. To have adequate access to

this network, each educator* in Texas needs his or her own computer workstation.† Students, too, need their own workstations. In the near term, the ratio is three students per workstation. Ultimately, each student will need individual access.

Schools can acquire the connections and workstations by purchase, lease, or other arrangements. It is proposed that the Permanent School Fund Insurance Program guarantee financing of such technology projects. This help to the schools would be accomplished at no projected cost to the state.

Teaching and Learning.

The infrastructure, while fundamental, merely provides *access* to information. In classrooms, it is the informational *resources* available through the technology infrastructure that will make the difference.

Like textbooks, technology-based materials must be instructionally sound and meet the learning needs of all students. To help ensure the quality of informational resources, technology initiatives and partnerships with providers of educational materials should receive continuing support.

Support of the Commissioner's Plan for Information Access will help ensure this access. Educators need access to educational accountability and other data for successful planning and instruction.

Ultimately, with distance learning and outreach to adult learners well established, funding formulas may need review and revision. Educator Preparation and Development.

Continual advancements in technologies mean that educators — even those well supplied with hardware and software — are rarely sufficiently prepared to take advantage of the instructional and management opportunities provided by technology.

All educators need paid professional leave time for training in integrating technologies into teaching and learning, instructional management, professional development, and administration. In addition, those who provide the training must be professionally qualified to help educators learn to apply systems in their particular areas of specialty.

This staff development is not merely shortterm. Instead it is re-tooling a statewide workforce of more than 250,000 professionals. Funds are requested to meet these professional development needs. In addition, incentives are sought to encourage preparation of teachers-intraining at higher education institutions in appropriate uses of technology.

Administration and Support Services.

Legislative action in regard to administrative uses of technologies focuses on the Public Education Information Management System (PEIMS). Currently, school districts provide at least a portion of the cost of PEIMS preparation. Support for this function should be returned to the regional education service centers. The next step is to redesign PEIMS to take advantage of the state comprehensive infrastructure and the Commissioner's Plan for Information Access by reducing paperwork and improving access to non-secure data. This will require legislative action in the mid-term. Ultimately, long-range technology planning

^{*} Educator - Professional staff at or affiliated with a public school or district, including teachers, administrators, curriculum coordinators, librarians, and others.

[†] Workstation - (Educator) A computer with transmission, productivity, and presentation capabilities for use by educators in teaching, management, and other professional tasks; can be desktop and/or portable, at local discretion.

(Student) A computer with a range of capabilities, depending on local priorities, for use by students in classroom, library, or home.

can be incorporated into general educational planning at the state level.

The Requests to the Legislature that follow vary in their fiscal impact. Some have no impact on the state. Others will reduce costs to schools; still others could, potentially, entail significant financial impact at the state level and, possibly, at the local level as well. The goals of preparing the citizens and workforce of the next century make these effects necessary and worthwhile.

Support for those goals that have fiscal impact can come from a variety of sources. The Technology Allotment and the Telecommunications Infrastructure Fund can both be directed for infrastructure, training, or other purposes related to this plan. Incentives can also be developed to encourage application of these funding sources for these purposes. To meet the state's infrastructure and training needs, however, additional sources of funds may need to be sought.

REQUESTS TO THE TEXAS LEGISLATURE

Infrastructure for Technology

LEG.IT.1-9

- .1 Recognize the need for a comprehensive state technology system, with voice, video, and data capabilities, with a priority on public education, by 2002
- .2 Recognize the need to provide a workstation to educators at an educator-to-workstation ratio of 1:1
- .3 Recognize the need to provide a workstation to students at a student-to-workstation ratio of 3:1
- .4 Recognize the need for a video teleconferencing unit for every campus
- .5 Maintain the Technology Allotment at least at its current level
- .6 Recognize the need for full funding to support the comprehensive state technology system and a student-toworkstation ratio of 1:1
- .7 Provide for technology financing guaranteed by the Permanent School Fund Insurance Program
- .8 Establish tax incentives for the private sector to share services and current technology
- .9 Increase funding to meet technology costs in state facilities program

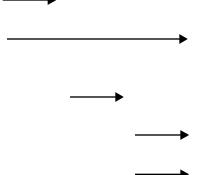
1997-98 1999-2002 2003-2010

Short-term Mid-term Long-term

Teaching and Learning

LEG.TL.1-5

- .1 Use general revenue to support Texas Education Agency statewide technology initiatives
- .2 Support partnerships with providers of instructional products and services to secure rights and cost efficiencies for Texas schools
- .3 Remove remaining impediments to district use of electronic materials through textbook funds
- .4 Modify other formulas to recognize impact of distance learning and technology
- .5 Establish tuition-based or other funding mechanism for access to pre-kindergarten through grade 12 learning for adult learners



Short-term Mid-term Long-term 1997-98 1999-2002 2003-2010

Educator Preparation and Development

LEG.EPD.1-4

- .1 Provide new funding for professional development days in integrating technology into instruction, staff development, and administration
- .2 Support provision of training for educators in integrating technology into teaching and learning, instructional management, professional development, and administration
- .3 Provide incentives for increased commitment of state and local funds for technology-related professional development
- .4 Provide incentives for educator preparation institutions that provide field-based experiences in settings that integrate technology into instruction

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Administration and Support Services

LEG.ADSS.1-4

- .1 Provide for the Commissioner's Plan for Information Access
- .2 Restore regional education service center funding for the Public Education Information Management System (PEIMS)
- .3 Redesign PEIMS with state funding for data collection
- .4 Eliminate the requirement for a separate state level longrange plan for technology and incorporate technology planning into the State Board of Education Long-Range Plan for Public Education

